





Created: 6 hours, 22 minutes after earthquake

**PAGER** 

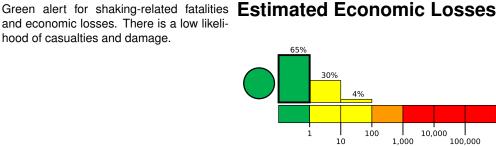
Version 8

# M 4.3, 77km W of Petrolia, CA

Origin Time: 2021-01-12 13:22:06 UTC (Tue 05:22:06 local) Location: 40.3945° N 125.1895° W Depth: 3.5 km

**Estimated Fatalities** 69% 10,000 1,000

and economic losses. There is a low likelihood of casualties and damage.



**Estimated Population Exposed to Earthquake Shaking** 

| ESTIMATED POPULATION<br>EXPOSURE (k=x1000) |                          | 12k*     | 114k   | 0     | 0        | 0        | 0           | 0          | 0        | 0        |
|--|--------------------------|----------|--------|-------|----------|----------|-------------|------------|----------|----------|
| ESTIMATED MODIFIED MERCALLI INTENSITY      |                          | I        | 11-111 | IV    | V        | VI       | VII         | VIII       | IX       | X+       |
| PERCEIVE                                   | SHAKING                  | Not felt | Weak   | Light | Moderate | Strong   | Very Strong | Severe     | Violent  | Extreme  |
| POTENTIAL                                  | Resistant<br>Structures  | None     | None   | None  | V. Light | Light    | Moderate    | Mod./Heavy | Heavy    | V. Heavy |
| DAMAGE                                     | Vulnerable<br>Structures | None     | None   | None  | Light    | Moderate | Mod./Heavy  | Heavy      | V. Heavy | V. Heavy |

<sup>\*</sup>Estimated exposure only includes population within the map area.

## Population Exposure

# population per 1 sq. km from Landscan 5000 125.8°W 125.0°W 40.1°N

#### PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

### **Structures**

Overall, the population in this region resides in structures that are highly resistant to earthquake shaking, though some vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

## **Historical Earthquakes**

| Date       | Dist. | Mag. | Max     | Shaking |
|------------|-------|------|---------|---------|
| (UTC)      | (km)  |      | MMI(#)  | Deaths  |
| 2000-09-03 | 327   | 5.0  | VI(77k) | 0       |
| 1980-11-08 | 109   | 7.3  | IX(16k) | 0       |
| 1993-09-21 | 340   | 6.0  | VI(47k) | 1       |

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

#### Selected City Exposure

from GeoNames.org

| MMI | City          | Population |
|-----|---------------|------------|
| II  | Humboldt Hill | 3k         |
| II  | Bayview       | 3k         |
| II  | Eureka        | 27k        |
| II  | Pine Hills    | 3k         |
| II  | Ferndale      | 1k         |
| II  | Cutten        | 3k         |
| II  | Fortuna       | 12k        |
| II  | Myrtletown    | 5k         |
| II  | Arcata        | 17k        |
| II  | Bayside       | 17k        |
| II  | McKinleyville | 15k        |

bold cities appear on map.

(k = x1000)

Event ID: nc73510010